

BRESAN, K.

Computing basic elements for shooting ground targets by independent anti-aircraft batteries. p. 54. (VOJNI GLASNIK, Vol. 8, no. 6, June 1954, Beograd, Yugoslavia)

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, no. 1 Jan. 1955, Uncl.

Geochimistry and properties of rare elements in the granitic pegmatites of the western Azov sea coast region. Yu. Yu. Vaynshteyn and V. M. Bresler. J. geol. Acad. sci. Ukraine, N. S. R. 6, No. 4, 131-153 (in English, 101-111) (1940).—Owing to very slow cooling of the pegmatitic melt intruded between granite rocks, good differentiation occurred in various types: I ordinary; II rare elements with columbo-tantalates, beryl and apatite; III schorlomuscovites with tourmaline and muscovite; IV contact schorlomuscovite with tourmaline, plagioclase muscovite, garnet and apatite. Rare elements occur alone as columbite, tantalite, beryl or zircon, or in isomorphous mixt. with other minerals. Ni and Ta are in II (III); Be in II (III, IV); Zr in silexites in II and in cassers, rare earths in columbo-columbates, in silexites in II and in placers; Pb in II, III, IV. The ilmenite sills of the Azov sea coast contain 0.25% Cr₂O₃ and traces of Ta₂O₅. The industrial utilization of these raw materials and their working up for rare earths as by-products from the ceramic and metallurgical industries are discussed. F. H. Rathmann

ASA-SEA METALLURGICAL LITERATURE CLASSIFICATION

ECONOMIC SIGNIFICANCE

SANDERS

SERIALS REF. ONLY USE

SERIALS

STOCK NUMBER

SERIALS REF. ONLY USE

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

Bogdanov, S. N.

23

MA

*Dresner, A. M. Courses of Metallurgy. (In-Russian.) 1pp. 102. 1939.
Moscow and Leningrad: Oborongizdat. (8 Rbl.)*

W(13)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

BRESHCHENKO, V.Ye.; IVANOVA, L.V.; RABINOVICH, S.I.

Chromatographic analysis of the fraction C₁—C₄. Nefteper, i
neftekhim. no.1:37-38 '65. (MIRA 18:6)

1. Groznyenskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i
projektno-konstruktorskogo institute kompleksnoy avtomatizatsii
neftyanoy i gazovoy promyshlennosti.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

BRESHCHENKO, E. M.

BRESHCHENKO, E. M. -- "Adsorption Deparaffination of Oil." Min Higher Education USSR, Moscow Order of Labor Red Banner Petroleum Institute imeni Acad. I. M. Gubkin, Groznyy, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

Knizhnaya Letopis' No 42, October 1956, Moscow

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CIA-RDP86-00513R000306910003-9"

BRESHCHENKO, E. M.

BRESHCHENKO, E. M. -- "Adsorption Deparaffination of Oil." Min Higher Education USSR, Moscow Order of Labor Red Banner Petroleum Inst imeni Acad. I. M. Gubkin, Groznyy, 1956. (Dissertation for the Degree of Candidate in TECHNICAL SCIENCES).

SO: KNIZHNAYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

BRESHCHENKO, Ya. M.

Adsorption deparaffinization of oils by activated carbon. Azerb.
neft. khoz. 36 no. 4:29-32 Ap '57. (MLRA 10:6)
(Adsorption) (Petroleum-Refining)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

BRESHCHENKO, YE. M.

BRESHCHENKO, Ye. M.

~~Bewaxing action of active carbon, Khim. i tekhn. topl. i masel no.9:~~
32-41 S '57.
(MLRA 10:11)

1. Gorognenskiy nauchno-issledovatel'skiy neftyanoy institut.
(Carbon, Activated) (Petroleum--Refining) (Paraffins)

BRESHCHENKO, Ye.M.

Comparing the selective action of polar and nonpolar adsorbents
on heavy petroleum products. Khim. i tekhn. topl. i masel 4
no.3:53-59 Mr '59. (MIRA 12:4)

(Adsorbents)

(Petroleum products)

BRESKHENKO, Ye.M.; OGLOBLINA, L.I.

Rapid method of determining the concentration of silicic acid and the modulus of liquid glass. Zhur. N. O. 5 no. 3:6
1960. (TIN 34:2)

1. Groznyanskij naftyanoy nauchno-issledovatel'skiy inst. iit.
(Glass) (Silicic acid)

BOGDANOV, N.F.; BRESHCHENKO, Ye.M.

Limit of the possible lowering of the solidification points of oils
by dewaxing. Azerb. neft. khoz. 39 no.1:33-36 Ja '68.

(MIRA 14:8)

(Petroleum--Refining) (Paraffin wax)

BRESHCHENKO, Ye.M.; OGLOBLINA, L.I.; EMMANUILOVA, Ye.M.

Stabilization of a solution of sodium aluminate by condensed sulfite-distiller's grains. Khim. prom. no.5:392-393 My '63.
(MIRA 16:8)

STRIGINA, L.R.; LAVRENT'YEV, K.G.; BRESHCHENKO, Ye.M.

Increasing the wear resistance of a granulated refractory clay
used as a heat carrier. Nefteper. i neftekhim. no. 11:13-15 '63.
(MIRA 17:5)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.

BRESCHCHENKO, Ye.M.; AMERIK, B.K.; STRIGINA, L.R.; BOLDYREVA, T.A.;
POL'YANOVICH, G.A.

Selecting a heat carrier for the contact pyrolysis of gases and
gasoline fractions. Trudy GrozNII no. 15:176-186 '63.
(MIRA 17:5)

BRESHCHENKO, Ye.M.; REMIZOV, V.G.

Mechanical strength of aluminum-chromium-potassium catalysts.
Trudy GrozNII no. 15:187-194 '63.
(MIRA 17:5)

KAZANSKIY, B.A.; DOROGOCHINSKIY, A.Z.; ROZENGART, M.I.; LYUTER, A.V.;
MITROFANOV, M.G.; BRESHCHENKO, Ye.M.; KALITA, L.A.; GOL'DSHTEIN,
Yu.A.; AFANAS'YEV, A.I.; MAKAR'YEV, S.V.; ZAMANOV, V.V.

Dehydrocyclization of normal hexane. Trudy GrozNII no. 15:
254-264 '63.
(MIRA 16:5)

STERLIGOV, O.D.; BRESHCHENKO, Ye.M.

Marushkin device for determining the mechanical strength of granules.
Kin. i kat. 5 no.3:559-560 My-Je '64. (MIRA 17:11)

1. Institut organicheskoy khimii AN SSSR i Groznenskiy neftyanoy
nauchno-issledovatel'skiy institut.

C 1

8

Genesis of the Ural diamonds. B. Il'yashenkov (Glavzoloto, Moscow). *Doklady Akad. Nauk S.S.R.* 50, 421-3 (1945).—Two hypotheses are still in conflict: the assumption of a genesis from ultrahot eruptives (for the South-African occurrences) and a formation with quartz by hydrothermal reactions (for the Brazilian deposits). The Ural diamonds are exclusively found in alluvial gravels of the west slope of the Ural Mts., in a close relation to the Pt-bearing ultrabasic rocks. The crystals show characteristic rounded forms indicative of corrosion processes. They are explained by a primary (abyssal or hypabyssal) formation from a magma, although porphyritic crystals in ultrabasic rock (peridotites, dunites) have not yet been observed. Tectonic analysis of the Ural complex in its Variscian striking speaks for such a genesis of diamond-bearing ultrabasic rocks. They are observed especially on the west slope, and the contact regions of the dunite and peridotite massives may contain the assumed primary diamond deposits. The basic compn. of the eruptives is, alone, not the essential condition for the formation of diamonds; they may also have been formed by an assimilation of C-contg. rocks in a magma, under high pressure and temp. If such formations are transported closer to the surface especially in siliceous or intermediate rock complexes, deposits with diamonds are formed which bear the characteristics of the Brazilian occurrences. Perhaps, the spheroidal graphite concretions in certain gneisses may represent pseudomorphs after diamond, in which the diamond could not be preserved under the existing phys.-chem. conditions of pressure and temp. W. Eitel

<p><i>CA</i></p> <p>The problem of the genesis of jarosites. B. K. Hirschberg Bull. Russ. Acad. Sci., 1952, No. 5, p. 229.</p> <p>After studying the common and structure of the oxidized ores of the pyrite deposits of Kazakhstan, it is concluded that jarosite may have originated by a process different from that usually postulated, namely,ogenesis from the $\text{Fe}(\text{OH})_3$ of ancient "iron hats" under hydrodynamic conditions, upon transgression of the sea or a considerable rise of the base-level of erosion and the level of underground waters. Until now, jarosite has been considered to be one phase in the oxidation process of pyrite in the zone of hypersalinity. The new theory is based on the reversible reaction: $\text{Fe}_2(\text{SO}_4)_3 + \text{H}_2\text{O} \rightleftharpoons 2\text{Fe}(\text{OH})_3 + 3\text{H}_2\text{SO}_4$.</p> <p>It is supposed that the red, occurring in the underground waters, of the ores and the cinnabar, of the underground waters, be replaced by limonites of the "iron hats." During the transgression of the sea boundary of the oxidation zone is much lower than the present underground water table, which is accounted for by paleogeographic conditions during the Alcizoc. In the present zones of oxidation, masses of pyrite are situated below the level of underground waters. Higher up they are found to be replaced by limonites of the "iron hats." During the Neogene, with lake water level, and a prolonged period of chemical weathering, there must have existed in the zones where jarosite now occurs conditions for more complete oxidation, namely, alteration of ferrisulfates and jarosites to hydrosulfides. It may be inferred that the $\text{Fe}(\text{OH})_3$ in many of these deposits once extended to greater depths than at present. During the Upper Cretaceous and Oligocene, a transgression of the sea must have sharply changed the course of hypersaline alterations. The rain waters, presumably then as now rich in free H_2SO_4 (pH sometimes less than 3), must have effected a shift in the reaction from $\text{Fe}(\text{OH})_3$ to colloidal ferrisulfate soils. Thus, conditions were created favorable for gravity separation of the liquid phase or colloidal soils, ("iron hats") and the solid phase (or disintegrated particles of quartz, barite, feldspar, etc.) ("unicksands," underlying the "iron hats") originally disseminated in the parent pyrite. This explains also the colloidal texture and high purity of the jarosite concentrations. Further transgression of the sea brought about a mixing of the underground saline waters (pH less than 3) with saline sea water ($\text{pH} = 7.8$) and a decrease in acidity followed by crystallization of salts and sulfates, after removal of the ferrisulfates of alk. metals from wall rocks and sea water. Apparently at this stage were formed the Al_2SiO_5 haloes detected in so many jarosite deposits. The haloes possibly were also solvents for dispersed Au and in this way favored its redeposition in the upper horizons of the oxidation zone. High-grade "seventy" Au is found today in cavities between jarosite and limonite concretions. Further support of the theory is obtained from some relicts found in an area of compact jarosites and quartz barites located well below the present water table. These relicts are acute angular or rounded fragments of compact "limonites" (hydromicaite to stilpnomelinite). It is noted that pyrite concretions are excellent raw material to produce, by grinding and calcination, a fine powder material known as crocat. <i>Esther W. Clancy</i></p>	
PROCESSES AND PROPERTIES INDEX	
8	

BRESHENKOV, B. K.

USSR/Geophysics
Glaciers

Mar 1948

"On the Origins of Glaciations in the Quaternary Period," B. K. Breshenkov, 14 pp

"Priroda" No 3

Summarizes existing Ice Age theories. Reviews paleobotanic evidence of extent and period of glaciation. Discusses case for polar alteration theory with diagram of supposed movement of North Pole from Oligocene Age to present day. Stresses need for further research, especially of moraine fauna and flora.

77T33

BRESHENKOV, B. Y.

Breshenkov, B. E. "On the basic elements of the structures of mining fields of gold deposits," Sbornik materialov po geologii zolota i platiny, Issue 9, 1948, p. 20-44 - Bibliog: 7 items

SO: U-3264, 10 April 53, (Letopis zhurnal 'nykh Statey, No. 4, 1949).

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

BRESHENKOV, B.K.

AZHGIREY, G.D., redaktor; BRESHENKOV, B.K., redaktor; PROKOF'YEV, A.P.,
redaktor; RUSINOV, L.A., redaktor; KASNOVA, N.E., redaktor;
GORDIYENKO, Ye.B., tekhnicheskiy redaktor

[Methods of exploration and prospecting for minerals] Metody poiskov
i razvedki poleznykh iskopaemykh. Izd. 2-e, perer. Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1954. 462 p.
(Prospecting) (MIRA 8:4)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

BRESHENKOV, B.K.

Quality and value of Indian diamonds produced in 1951-1955.

Biul. TSIIN гевет.мет. no.17:30-32 '57.
(India--Diamond mines and mining)

(MIRA 11:7)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

22.2246

89364
S/089/61/010/002/016/018
B102/B209

AUTHORS: Breshenkova, Ye. B., Orlov, V. V.

TITLE: The solution of the equation of motion for a medium with a one-directional point emitter

PERIODICAL: Atomnaya energiya, v. 10, no. 2, 1961, 175-177

TEXT: The present "Letter to the Editor" presents the solution of the equation of motion for a gamma radiation emitted from a point source in one direction in a scattering and absorbing medium.

$$\vec{\nabla} \text{grad } F(\vec{r}, \vec{n}, \lambda) = -\mu(\lambda)F(\vec{r}, \vec{n}, \lambda) + \int_{\lambda}^{\infty} d\lambda' K(\lambda', \lambda) \int d\vec{n}' \frac{1}{2\pi} \delta(1 - \vec{n} \cdot \vec{n}' - \lambda + \lambda') x$$
$$F(\vec{r}, \vec{n}', \lambda') + \delta(\vec{r} - \vec{r}_0) \delta(\vec{n} - \vec{n}_0) \delta(\lambda - \lambda_0). \text{ By means of the reciprocity theorem}$$
$$G(\vec{r}, E, \vec{n}; \vec{r}_0, E_0, \vec{n}_0) = G^+(\vec{r}_0, E_0, \vec{n}_0; \vec{r}, E, \vec{n}) \text{ and/or after integration over}$$
$$d\vec{n}: G_0(\vec{r}, E; \vec{r}_0, E_0, \vec{n}_0) = G^+(\vec{r}_0, E_0, \vec{n}_0; \vec{r}, E) \text{ where } G_0 = \int G d\vec{n}, \text{ the solution of}$$

this equation may be transformed into the solution of the equation of motion

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$$\begin{aligned} -\Omega \operatorname{grad} F^*(r, \Omega, \lambda) = & -\mu(\lambda) F^*(r, \Omega, \lambda) + \\ & + \int_{\lambda}^{+\infty} d\lambda' K(\lambda, \lambda') \int d\Omega' F^*(r, \Omega', \lambda') \frac{1}{2\pi} \times \\ & \times \delta(1-\Omega\Omega'-\lambda'+\lambda) + \delta(r-r') \delta(\lambda-\lambda'). \quad (2) \end{aligned}$$

$G(\vec{r}, E, \vec{n}; \vec{r}_0, E_0, \vec{n}_0)$ is Green's function of the equation of motion which describes the radiant flux with energy E in the direction of motion \vec{n} (the single point source emitting the energy E_0 is assumed to be located at \vec{r}_0 , its direction of motion is \vec{n}_0). $F(\vec{r}, \vec{n}, \lambda)$ denotes the radiant flux at the point \vec{r} with wavelength λ in the direction \vec{n} ; $K(\lambda', \lambda) = n Z \pi r_0^2 (\lambda/\lambda')^2 \left[\frac{\lambda}{\lambda'} + \frac{\lambda'}{\lambda} - 2(\lambda' - \lambda) + (\lambda' - 1)^2 \right]$ stands for the probability density of Compton scattering with a change of the wavelength from λ' to λ ; $\mu(\lambda)$ denotes the absorption coefficient. The total-flux distribution of gamma radiation may be determined according to the formula $F_0(r', \lambda') =$

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$F^+(x_0, \xi_0, \lambda_0)$. Considering the symmetry of the source and with $\vec{r} - \vec{r}' = \vec{R}$ and $(\vec{r} \cdot \vec{R})/\vec{R} = \xi$ one obtains

$$\begin{aligned} & -\xi \frac{\partial F^+(R, \xi, \lambda)}{\partial R} \frac{(1-\xi^2)}{R} \frac{\partial F^+(R, \xi, \lambda)}{\partial \xi} = \\ & = -\mu(\lambda) F^*(R, \xi, \lambda) + \int_{\lambda}^{\lambda+2} d\lambda' K(\lambda, \lambda') \int d\Omega' \times \\ & \times F^*(R, \xi', \lambda') \frac{1}{2\pi} \delta(1-\Omega\Omega' - \lambda' + \lambda) + \frac{\delta(R)}{4\pi R^2} \delta(\lambda - \lambda'). \end{aligned} \quad (3)$$

By expanding the conjugate flux into a spherical harmonic $F^*(R, \xi, \lambda) = \sum_{l=0}^{\infty} \frac{2l+1}{4\pi} F_l^*(R, \lambda) P_l(\xi)$ and substituting in (3), multiplying by $P_l(\xi)$ and integrating over $d\Omega$ one obtains the equation for $F_l^*(R, \lambda)$:

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$$\begin{aligned}
 & -\frac{(l+1)}{2l+1} \left(\frac{l+2}{R} + \frac{\partial}{\partial R} \right) F_{l+1}^*(R, \lambda) + \\
 & + \frac{l}{2l+1} \left(\frac{l-1}{R} - \frac{\partial}{\partial R} \right) F_{l-1}^*(R, \lambda) = \\
 & = -\mu(\lambda) F_l^*(R, \lambda) + \int_{\lambda}^{\lambda+2} d\lambda' K(\lambda, \lambda') \times \\
 & \times \mathcal{P}_l(1-\lambda'+\lambda) F_l^*(R, \lambda') + \frac{\delta(R)}{R^2} \delta(\lambda-\lambda') \delta_{l_0}. \quad (5)
 \end{aligned}$$

By multiplication by R^n and integration over the entire volume, the following is obtained for the moments $b_{l,n}(\lambda)$:

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$$\begin{aligned}
 & -\frac{1}{2l+1} [(l+1)(l-n) b_{l+1, n-1}(\lambda) - l(l+n+1) \times \\
 & \quad \times b_{l-1, n-1}(\lambda)] = -\mu(\lambda) b_{l, n}(\lambda) + \\
 & + \int_{\lambda}^{\lambda+2} d\lambda'' K(\lambda, \lambda'') J_l(1-\lambda''+\lambda) b_{l, n}(\lambda'') + \\
 & \quad + 4\pi \delta(\lambda-\lambda') \delta_{l_0} \delta_{n_0}. \tag{6}
 \end{aligned}$$

где

$$b_{l, n}(\lambda) = \int_0^\infty R^n F_l^*(R, \lambda) 4\pi R^2 dR.$$

This equation determines only those moments $b_{l, n}(\lambda)$ for which $l \leq n$ and l and n are of equal parity. With

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$$F_{2l}^*(R, \lambda) = \frac{e^{-\mu R}}{4\pi R^2} \sum_{n=0}^N a_{2l, n}(\lambda) (\mu R)^n;$$

$$F_{2l+1}^*(R, \lambda) = \frac{e^{-\mu R}}{4\pi R^2} \sum_{n=0}^N c_{2l+1, n}(\lambda) (\mu R)^n,$$

where $a_{2l, n}(\lambda)$ and $c_{2l+1, n}(\lambda)$ are solutions of the system of $N+1$ equations, one obtains

$$\left. \begin{aligned} b_{2l, 2m}(\lambda) &= \sum_{n=0}^N \frac{(n+2m)!}{\mu^{2m+1}} a_{2l, n}(\lambda); \\ b_{2l+1, 2m+1}(\lambda) &= \sum_{n=0}^N \frac{(n+2m+1)!}{\mu^{2m+2}} c_{2l+1, n}(\lambda) \end{aligned} \right\} (7)$$

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with $m = l, l+1, l+2, \dots, l+N$. The solution of system (7) permits to express the coefficients $a_{2l,n}(\lambda)$ and $c_{2l+1,n}(\lambda)$ in terms of the even-even and odd-odd moments which were determined from (6). The higher the moments known, the more accurate one can calculate $F_l(R, \lambda)$. In solving this problem, it is expedient to eliminate the unscattered radiative flux from the equation of moments (6), which may be brought about in the usual way. In conclusion, the authors thank V. F. Turchin, G. I. Marchuk, and Sh. S. Nikolayshvili for their discussions. I. I. Bondarenko is mentioned. There are 6 references: 2 Soviet-bloc and 4 non-Soviet-bloc.

SUBMITTED: August 25, 1960

X

Card 7/7

USSR/Soil Science .. Physical and Chemical Properties of Soils.

J-2

Abs Jour : Ref Zhur - Biol., No 9, 1958, 38999

Author : Breshkovskiy, P.M.

Inst
Title : On the Rate of Reconstruction and Destruction of the
Structure of Soils in Irrigated Grass Crop Rotations of
the Kursk ZOMS.

Orig Pub : V. sb. Orosheniye s-kh. cul'tur v Tsentr. - chernozem.
polose RSFSR, vyp. 2, M., AN USSR, 1956, 21-41.

Abstract : The influence of irrigation of mixtures of the followings
grasses: clover- timothy and alfalfa - fescue, on the
rate of structure formation in black-earth soils was tes-
ted in this study. In the irrigated sector the structure
deficit in the sub-arable horizon was eliminated almost
entirely.
In the arable horizon, the deficit was reduced by 2/3;
but in the non irrigated sector, the deficit was diminished

Card 1/2

- 5 -

Country : USSR

Category: Cultivated Plants. General Problems.

M

Abs Jour: RZhBiol., No 22, 1958, No 100198

Author : Breshkovskiy, P.M.

Inst : Kursk Zonal Experimental Melioration Station;
Academy of Sciences USSR

Title : Conditions of Natural Water Supply of Some
Agricultural Crops in the Region of Kurskaya
Zonal Experimental Melioration Station in
1949-1952.

Orig Pub: V sb.: Orosheniye s.-kh. kul-tur v Tsentr.-
chernozem. polose RSFSR, Vyp. 2, M., AN SSSR,
1956, 52-76

Abstract: Conditions of natural water supply for the
agricultural crops on the chernozems at

Card : 1/2

Country : USSR
Category: Cultivated Plants. General Problems.

M

Abs Jour: RZhBiol., No. 22, 1958, No 100198

Kursk Zonal Experimental Melioration Station in 1949-1952 are briefly examined. It has been demonstrated that with the aid of snow retention and a decrease in the coefficient of the run-off by means of ridge plowing, it is feasible to hold about an additional 130 millimeters of available moisture in the 2nd soil and to secure a yield of spring wheat of not less than 43 centners/ha. on chernozem soils. -- S.A. Nikitin

Card : 2/2

M-1

USSR/Soil Science - Physical and Chemical Properties of Soil

J

Abs Jour : Ref Zhur Biol., No 1, 1959, 1354

Author : Breshkovskiy, P.M.

Inst : ~~Central Institute of Soil Science~~

Title : Accelerated Determination of the Soil Moisture by a Pressure Method

Orig Pub : Pochvovedeniye, 1957, No 8, 79-85

Abstract : A method of determining soil moisture by means of wet compression is described. A weighed portion of soil a_1 with unknown moisture W was moistened on a package of filter paper and then compressed. After compression the weight of soil a_2 was determined. Moisture was calculated according to the formula $W = \frac{a_1(100 + m)}{a_2} - 100$,

where m is the maximal molecular moisture capacity (MMC), determined by the compression method by means of dampening the soil on the filter. The absolute error in the

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USSR/Soil Science - Physical and Chemical Properties of Soil.

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Abs Jour : Ref Zhur Biol., No 1, 1959, 1354

interval of measuring the moistness of 5.77 - 53.7% consisted of 1.17 to -1.17%. By the dry compression method the known portion of soil (4 g) was maintained under pressure of 66 kg/cm² for ten minutes between the packings of filter paper. The unknown moisture was determined according to the weight of the soil specimen after compression using a calibrated graph drawn earlier. In the moisture interval of 5.7 - 36.6% the absolute error was equal to -0.2 to 0.8%. The wet compression method was applied at any interval of wetness, the method of dry compression was used practically from hygroscopic moisture to complete water capacity. The calibrated curve required periodic correction during the vegetative period.
-- Ye.A. Dmitriyev

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BRESHKOVSKIY, P.M.

Effect of irrigation on the humus content of deep Chernozems.
Pochvovedenie no.1:105-109 Ja '62. (MIRA 17:1)

1. Kurskaya zonal'naya optytno-meliorativnaya stantsiya.

COUNTRY	: Yugoslavia	E-17
CATEGORY	:	
ABS. JOUR.	: RZKhIm., No. 16 1959, No.	23062
AUTHOR	: Bresjanac, M. and Kostic, I.	
INST.	: Not given	
TITLE	: The Reaction of Hexamethylenetetramine with Nitric Oxide	
ORIG. PUB.	: Arkhiv Farmats, 8, No 4-5, 257-259 (1953)	
ABSTRACT	: The reaction of mixtures of NO_2 and O_2 with a solution of hexamethylenetetramine (I) in CHCl_3 , gives a white crystalline precipitate, a molecular compound of I with NO_2 and HCl , insoluble in most organic solvents and soluble in water. An aqueous solution of the product has a pH of 4 and gives a positive test for Cl^- and NO_3^- . Authors' summary	
CARD:	1/1	

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BRESKER, R.I.

USSR/Physics - Dielectric Glasses

Jun 52

"Dependence of Dielectric Permeability and Angle of Losses of Silicate Glasses on Their Composition"
A. A. Appen, R. I. Bresker

"Zhur Tekh Fiz" Vol XXII, No 6, pp 946-954

Several series of specially manufd silicate glasses of various compns were tested at room temp and at a frequency of $4.5 \cdot 10^8$ cycles. Basically the same laws as for boric glasses were found. For a number of oxides, empirical numerical values characterizing dielec permeability of oxides in glasses were deducted. Received 30 Jul 51.

219T83

74

Physicochemical investigation of di-component alkali-boron glasses. R. L. Breker and K. S. Evstrop'ev.
Appl. Chem. (USSR), 1952, No. 1 (in English), 22w.
Printed, Khim 13, 908-11 (1952); cf. C.A. 48, 117468.—
Structural peculiarities manifest by changes in n_D , d., mol. refraction (I), and mol. vol. were investigated in the B_2O_3 - Li_2O , - Na_2O , and - K_2O systems. Glasses with Li_2O from 3 to 28 mole% were studied. The n_D and d. increase with Li_2O content but I and mol. vol. decrease. In the Na borate glasses the n_D and d. increase rapidly to 9 mole % Na_2O , decreasing between 9 and 20 mole %, increasing at 20 mole %, and again decreasing at 23 mole %. I and mol. vol. decrease with increase of Na_2O content. The n_D of K borate glasses increase from 1.4825 to 1.4888 from 0 to 12 mole % K_2O . From 12 to 22 mole % there is insignificant change while from 22 to 34 mole % there is an increase in n_D to 1.5021. The change in d. follows that of the index while I and mol. vol. decrease in proportion to the K_2O increase. The fact that Li glasses exhibit a straight-line function for their properties and highest optical const. permits an assumption that upon its introduction into a glass, Li fills the gaps which are present in the B structure without distortion of the structure. The curves for Na and K indicate that their chance of penetration into the infrastructural gaps are less and they will be less tightly packed owing to their size. Oxygen is deformed to a greater extent in Li glasses than in Na or K glasses. A. J. Cohen

BRESKER, R. I.

MK

Oxygen ion volume change in boroalkaline glasses.
R. I. Bresker and K. S. Rystrem. *J. APPL. CHEM.*
USSR, No. 1, 1967, 301652 (1969, translation); *Zhur.*
Priklad. Khim., 25, 1002 (1952).—The explanation that B
coordination changes from trigonal to tetrahedral upon in-
crease of Na₂O and K₂O content should not be considered
complete as a majority of the anomalies are observed in the
compos. range where a B coordination change should not
take place. O plays a basic role in connection with vol.
change in these glasses and is related to the nature of the
alkali. The countr. functions of the O-ion vol. in boro-Na
and boro-K glasses are similar to the fusion curves for these
systems. This is considered to be an indication of the
presence, in the glass, of definite chem. compd., as shown
by the structural diagram of the systems. A. J. Cohen

(1)

BRESLER, R. I.

USSR.

Dependence of the dielectric constant and the loss angle of silicate glasses on their composition. A. A. Appen and R. I. Bresler. *Zhur. Tekh. Fiz.* 22, 640-51 (1953); *Science Abstr.*, 56A, 1116 (1953).—The silicate glasses investigated were specially produced and tested at 4.6×10^4 cycles/sec. and room temp. The relations observed were established generally and qualitatively. They correspond in principle to those of boron glasses. For a no. of oxide components approx. values of the partial dielec. const. were found, permitting the dielec. const. of boron-less silicate glasses to be calcd. from their compn. on the additivity law, correct within $\pm 1.5\text{--}3.0\%$. This applies to SiO_2 contents 50-84%, the other components being in concns. of 0-25%. K. L. C. ①

62

✓ 875. Effect of iron oxides on thermal expansion of ground-cast charges for steel
A. A. APPEN, R. J. BUSKIR, and I. A. YUDOVICH, *Zhurnal Russkogo Metallovedeniya*, No. 12, 1961.

Fused charges was measured in the range 20° to 150° C. The effect of Fe oxides was of the greatest interest.

SOV/120-59-4-41/50

AUTHORS: Bresker, R. I., Voronin, N. I., Latysheva, Z. I.

TITLE: An Infrared Source Based on Silicon Carbide

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 4, p 149 (USSR)

ABSTRACT: The first Russian SiC ('globar') sources are described (Fig 1). The resistance is 5.8 ohms; the power drain needed to give 1400°C (the working temperature) is 250-350 W. Fig 2 shows the useful life (in hours) as a function of surface temperature. Fig 3 shows the spectral energy curves for temperatures of 1200 and 1400°C. The paper contains 3 figures.

ASSOCIATION: Institut ogneuporov (Refractories Institute)

SUBMITTED: May 24, 1958.

Card 1/1

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

BRESKER, R.I.; VORONIN, N.I. (Leningrad).

Thermal compensators based on silicon carbide. Avtom. i telem.
20-no.1:95-96 Ja '59. (MIRA 12:1)
(Electric resistors--Thermal properties)
(Silicon carbide)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

S/131/63/000/002/002/002
B101/B186

AUTHORS: Bresker, R. I., Voronin, N. I., Khrycheva, D. D.

TITLE: Effect of impurities in carborundum on the properties of heaters

PERIODICAL: Ogneupory, no. 2, 1963, 92 - 96

TEXT: Heaters, 320 mm long, 16 mm in diameters were produced from carborundum with different impurity contents. The electrical and physico-mechanical properties of these heaters were tested. Results: Siliconizing changed the chemical composition the more strongly the higher the amount of impurities in the initial carborundum. The smaller the SiC content in the initial carborundum the higher was the free Si content after the siliconizing. High Fe_2O_3 and Al_2O_3 contents caused the decomposition of SiC to SiO_2 by partial oxidation and separation of free Si. In carborundum with 1.95 % Fe the SiC content decreased from 92.74 to 87.43 and the content of free Si increased from 0.95 to 6.06, the SiO_2 content increased from 1.55 to 4.80. Such heaters exhibited a ferroalloy microstructure.
Card 1/3

Effect of impurities in ...

8/131/63/000/002/002/002
B101/B186

An admixture of 2 % of Fe_2O_3 or Al_2O_3 did not increase the Fe_2O_3 and the Al_2O_3 content in the siliconized carborundum. Hence the behavior of admixtures is different from that of impurities. Porosity increased and the bending strength decreased as the impurity content increased, e. g., carborundum heaters with 96.42 % SiC, 0.37 % Fe (type I) had a bending strength of 202 kg/cm^2 , carborundum heaters with 92.74 % SiC, 1.95 % Fe (type II) had a bending strength of 111 kg/cm^2 . The oxidizability increased with the impurity content. The increase in weight after a 50-hr heating at 1400°C was $888 \cdot 10^{-5} \text{ g/cm}^2$ in I, $3097 \cdot 10^{-5} \text{ g/cm}^2$ in II. The oxidizability increased also with increasing temperature and longer heating period. Heaters with an SiC content below 96 % had a negative temperature coefficient of resistivity. The higher the impurity content the lower the temperature at which a transition takes place to the negative temperature coefficient. A high Fe_2O_3 content decreases, a high Al_2O_3 content increases the resistivity. The lifetime of heaters with

Card 2/3

Effect of impurities in ...

8/131/63/000/002/002/002
B101/B186

97.77 % SiC was 79 hr, with 74.03 % SiC only 8 hr. Conclusions: For high-quality heaters, carborundum with at least 98 % SiC must be used. The impurity content must not exceed 2 % with a maximum amount of 0.5 % $Fe_2O_3 + Al_2O_3$. There are 6 figures and 4 tables.

ASSOCIATION: Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractories)

Card 3/3

VORONIN, N.I., doktor tekhn. nauk; BESKEM, R.I., kand. khim. nauk; KHRYCHEVA,
D.D., mladshiy nauchnyy sotrudnik

Investigating the chemical composition, electrical, and physicomechanical
properties of heaters, depending on the quality of the initial carborun-
dum. Trudy Inst. ogneup. no.34:164-192 '63. (MIRA 17:10)

L-25161-15 EWP(e)/EWT(m)/T WH
ACCESSION NR: AP5001302

S/0131/64/000/012/0565/0569

AUTHOR: Voronin, N. I.; Kuznetsova, V. L.; Bresker, R. I.

TITLE: Testing carborundum heating elements for stability in air

SOURCE: Ogneupory, no. 12, 1964, 565-569

TOPIC TAGS: carborundum stability, carborundum heating element, carborundum oxidation, carborundum heat resistance, carborundum conductivity, carborundum microstructure

ABSTRACT: The authors determined the stability of silicon carbide heating elements at 1400, 1500 and 1600°C in air and tested their porosity, bending strength and electrical resistivity. A single-core electric furnace was used to test three types of carbide: coarse-grain and fine-grain α -SiC and β -SiC, the chemical composition and some physical properties of which are given in tables and the microstructure of which is shown in photomicrographs. At 1400°C, the fine-grain α -SiC is considerably stronger than coarse-grain β -SiC. The first proved to have the longest service life at 1600°C, but the second lasted longer at 1500°C. The electrical resistance began to rise at 1500°C, but then aging set in due to the formation of a surface film of SiO_2 . By the end of the test at 1600°C, the resistance fell

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L 25161-65

ACCESSION NR: AP5001302

sharply in coarse-grain elements, but not in either of the fine-grain types. Both types showed an increase of SiO_2 while in use, but the fine-grain type showed higher oxidation than the coarse-grain elements. With prolonged use, porosity declined more in fine-grain than in coarse-grain elements due to oxidation. Oxidation also increased the weight of specimens which were heated for 50 hours. The authors conclude that β -SiC elements last longer at 1400°C than α -SiC; at 1500°C, both the β -SiC and coarse α -SiC elements give equal service, but the fine-grain α -SiC lasts still longer. At 1600°C coarse-grain α -SiC elements have the longest service life. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: Vsesoyuznyy institut ogneuporov (All-union refractories institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REV Sov: 002

OTHER: 004

Card 2/2

L 39929-65 EWP(e)/EWT(m)/EWP(w)/EPF(n)-2/EWG(n)/EWA(d)/EPR/T/EWP(t)/
EWP(k)/EWP(z)/EWP(b)/EWA(c) Pf-4/Ps-4/Pu-4 IJP(c) JD/JG/AT/WH
ACCESSION NR: AR5000708 S/0081/64/000/017/M004/M005

SOURCE: Ref. zh. Khimiya, Abs. 17M33

41

B

AUTHOR: Voronin, N. I.; Bresker, R. I.; Shrabman, D. I.

TITLE: Phase transformations during siliconizing annealing and their effect on
the properties of carborundum heaters

CITED SOURCE: Sb. Silikaty i okisly v khimii vysokikh temperatur. M., 1963,
269-280

TOPIC TAGS: carborundum, silicon carbide, heater manufacture, silicon carbide
phase composition, siliconizing annealing, heater conductivity,
heater mechanical property, carbon black, coking

TRANSLATION: The authors note that during the manufacture of heaters from silicon carbide, the siliconizing annealing has a significant effect on their phase composition and physicomechanical and electrical properties. Siliconizing annealing is carried out in electric resistance ovens by two methods: 1) around a carbon pipe, and 2) by passing a stream directly across the heater. Annealing of heaters around a pipe was tested on compositions containing 70% finely dispersed SiC, 12-

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ACCESSION NR: AR5000708

30% carbon black and 0-18% silicon. The changes in phase and chemical composition and in the microstructure after coking and siliconizing annealing of various weights are reported. After siliconizing annealing, all the samples had approximately the same chemical composition (in %): SiC 97.7-99, Si 0.4-1, SiO₂ 0.5. The properties of the heaters were as follows: porosity 21.2-43.5%, strength 150-1050 kg/cm², electrical resistance 1.6-2.7 ohm. Siliconizing annealing by direct passage of a stream was studied on heaters prepared from coarse-grained SiC and a small amount of carbon black. Liquid glass was used as a binder. Siliconizing annealing was carried out under various annealing conditions and with varying compositions of siliconizing charge and initial SiC. An increase in the duration of siliconizing annealing had no significant effect. The quality of the original SiC had a notable effect on the properties of the heaters. The authors note that this study has contributed to the perfection of the heater manufacturing process and the improvement of their useful properties. R. Bresker

SUB CODE: MT

ENCL: 00

518
Card 2/2

VORONIN, N.I.; AGRAMTSOVA, V.I.; BRESKER, R.I.

Service of electric heaters made of silicon carbide used in
various media. Ogneupory 30 no.7:22-26 '65. (MIRA 18:8)

1. Vsesoyuznyy institut ogneuporov.

BRESKER, Ya.B.; GOLOD, V.N.

Design and introduction of overhead push conveyors. Avt. prom.
30 no.12:36-39 D '64. (MIRA 18:2)

1. Tsentral'noye konstruktorskoye byuro Gosudarstvennogo komiteta
po mashinostroyeniyu pri Gosplane SSSR.

BRESKIN, P.

AUTHOR:

BRESKIN, P.

32-6-49/54

TITLE:

On Sample Ingots for the Testing of "Rockwell" Apparatus.
(Ob obraztsovых брусках для проверки приборов "Rockwell", Russian)

PERIODICAL:

Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 765-765 (U.S.S.R.)

ABSTRACT:

The Soviet industry put "Rockwell" apparatus on the market together with sample ingots of a certain hardness for the purpose of periodically testing these apparatus. These ingots, however, are subjected to a certain wear in the course of time, and could no longer be used. It proved impossible to acquire new ones. An unsuccessful attempt was made to produce such test ingots on the premises of the respective factory. The enquiry is therefore made here where such test ingots for "Rockwell" apparatus are produced and whether it would be possible to obtain a technical instruction for their production.

ASSOCIATION: Breskin, P., manager of the Dnepropetrovsk Tube Rolling Plant

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 1/1

Breskin, P.P.

AUTHORS: Brokskin, F. P. Head of OTK and
Urin, L.I., Senior Engineer of OOT. 130-3-17/21
TITLE: Not given.

PERIODICAL: Metallurg, 1958, No.3, pp.33-34 (USSR).

ABSTRACT: This is another contribution to the discussion on the organization of a technical control department following a recent article in "Metallurg" (1957, No.9) by N. P. Inozemtsev et al. of the "Serp i Molot" Works. It describes changes made at the imeni Lenin Works in Dnepropetrovsk following a careful scrutiny of the work of department personnel. Several duties performed by technical controllers were abolished and some (e.g. acceptance of certain materials) were handed over to commercial and production workers. These measures together with a reorganization of the controllers' working day is said to have enabled 30% of the department workers to be transferred to other work. An automatic device for tube wall-thickness measurement is now being developed by the Physics Institute of the Ac.Sc. of the Latvian SSR; another automatic device (being developed at the Works) will reveal weld-seam defects. The authors do not support the suggestions in the Inozemtsev

Card 1/2

Not given.

and that the department should not be subordinate
to the director of the enterprise. 130-3-17/21

ASSOCIATION: Dnepropetrovsk Works imeni Lenin.
(Dnepropetrovskiy Zavod im. Lenina).

AVAILABLE: Library of Congress.

Card 2/2

SOV/142-58-4-12/30

AUTHOR: Breskin, V.A., Lev, A.Yu., Mil'man, D.P.

TITLE: On the Compression of the Frequency Spectrum of Binary Communications with Small Probability of One of the States (O szhal'ii chastotnogo spektra dvoichnykh soobshcheniy s maloy veroyatnost'yu odnogo iz sostoyaniy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Radiotekhnika, 1958, Nr 4, pp 466-473 (USSR)

ABSTRACT: The author discusses a method for increasing the effectiveness of communications channels to allow binary communication transmission. He suggests decreasing the necessary number of distinguishable levels by dropping certain unlikely combinations of binary symbols. A probability evaluation is made of the interference arising from this method of communication transmission. The paper deals first with the method of transmission and then evaluates the distortions by constructing a theoretical problem of probability. This is solved by

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SOV/142-58-4-12/30

On the Compression of the Frequency Spectrum of Binary Communications
with Small Probability of One of the States

constructing a complete manifold of minimally-sufficient regions adjacent to isolated wrong zero with $n = 3$, by determining $P(\cdot)$ where $n = 2$, by reduction to an isolated wrong zero where $n = 3$ and by determining $p(\cdot)$ where $n = 3$. Finally a computational example follows and as a supplement the formulation of $p(\cdot)$ from the minimum amount of data. There are 2 Soviet references.

ASSOCIATION: Kafedra teorii elektricheskoy svyazi i dal'ney svyazi Odesskogo elektrotekhnicheskogo instituta svyazi
(Chair of Electro-Communications and Long Distance Communications Theory, Odessa Electro-Engineering Institute of Communications)

SUBMITTED: February 24, 1958
Card 2/2

6,7500

25820

S/142/60/003/006/010/016
E140/E135

AUTHORS: Breskin, V.A., Vil'ner, A.Ye., and Lev, A.Yu.

TITLE: On the approximation of a binary message by a Markov chain

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Radiotekhnika, 1960, Vol.3, No.6, pp. 636-643

TEXT: The article concerns the best approximation of a binary message by a Markov chain. The illustrative material of the article is concerned with the binary signal obtained from the facsimile transmission of line drawings. The closeness of a given statistical model to the events it approximates can be defined in various ways. One of the most frequently used criteria is the minimum mathematical expectation of some power of the error magnitude. In the present article two methods of calculating the parameters of higher-order Markov chains are examined. The first uses as the initial data the probability distributions of the length of black and white bars. In the second method the basic statistic is the distribution of black-white combinations for 1, 2, 3 time units. It is found that the second method yields a Markov Card 1/2

25820

On the approximation of a binary ...

S/142/60/003/006/010/016
E140/E135

chain which corresponds much more closely to the statistical characteristics of the actual message. The author points out that this is not accidental, since the important statistical properties of the message and the Markov chain are more correctly described by the combinations than by the simple duration distributions. In particular, it is found that the facsimile signal for line drawings can be sufficiently well approximated by the Markov chain C^2_2 . There are 2 figures, 4 tables and 5 Soviet references.

ASSOCIATION: Kafedra dal'ney svyazi Odesskogo elektrotehnicheskogo instituta svyazi

(Department of Telecommunications,
Odessa Electrotechnical Institute of Communications)

SUBMITTED: December 10, 1959

Card 2/2

BRESKIN, V.A.

Concerning an effective telegraph communication system. Elektrosviaz:
16 no.2:70-72 F '62. (MIRA 15:2)
(Telegraph, Wireless)

L 63887-65 EWT(d)/EWT(1)/FFD-2/EWA(1)

ACCESSION NR: AP5021562

UR/0286/65/000/013/0030/0030
621.395.387

14

15

AUTHOR: Breskin, V. A.

TITLE: A device for correcting linear distortions in pulse signals. Class 21,
No. 172361

SOURCE: Byulleten' izobreteniya i tovarnykh znakov, no. 13, 1965, 30

TOPIC TAGS: pulse signal, signal distortion, ²⁵ signal generator

ABSTRACT: This Author's Certificate introduces a device for correcting linear distortions in pulse signals. The unit contains a receiver with counting and subtraction stages in the main circuit, and a shaping network in the feedback circuit. The device is designed for independent control of the initial phase in voltages which modulate the transient of the linear system. The shaping network is made in the form of a bank of complex frequency generators. The output signals from these generators are fed to a common summation unit. Each complex frequency generator contains one or two tank circuits. Voltages generated by transients in the capacitive and inductive components of the tank circuits are fed to an amplitude and sign regulator.

Card 1/3

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

L 63687-65

ACCESSION NR: AP5021562

ASSOCIATION: none

SUBMITTED: 27Sep61

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 2/3

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

L-63887-65
ACCESSION NR: AP5021562

ENCLOSURE: 01

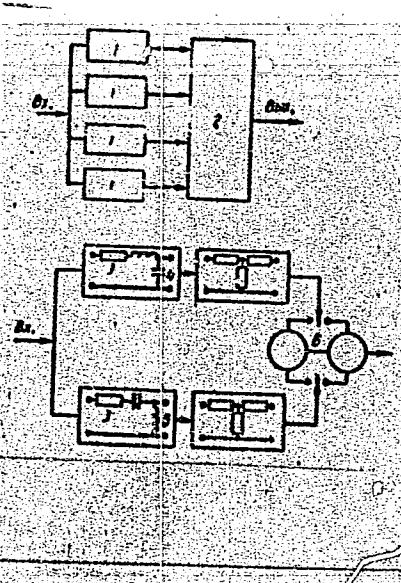


Fig. 1. 1--complex frequency generator; 2--common summation unit; 3--tank circuits; 4--circuit capacitance; 5--circuit inductance; 6--sign and amplitude regulator

Card 3/3

BRESKOVSKA, V.; IVCHINOVA, L.

Wavellite of the Madzharovo complex-ore deposit. Godishnik
biol 56 275-284 '61/'62.

BRESKOVSKA, V.

The quartz-chlorite veins in Surnela Sredna Gora.
Godishnik biol 56 305-309 '61/'62.

BRESKOVSKA, V.; MINCHEV, D.

"Vladimir Alfanas'evich Obruchev; His 90th Birthday", p. 21. (PRIHODA I
ZNANIE, Vol. 6, no. 10, Dec. 1953, Sofiya, Bulgaria).

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 4, April 1954.

V. V. SKOLSKAYA
V. V. Skolskaya, "Columbite from the Central Rhodopian Mountain," V. V. Skolskaya, *Annuaire univ. Sofia 48, Fac. phil., geol. et Geogr.*, Livre 2, 01-2/1952/53-1953/54 (English summary). Columbite crystals, up to 1 cm. long, were found in pegmatite veins, probably a Pre-Cambrian crystal complex. They were black opaque crystals d. 5.67, crystal forms: a (100), b (010), c (210), and e (201). Spectrographic analysis showed the presence of Nb, Ta, Fe, Mn, Ti, W, and Sn.
G. M. Gruerian

BRESKOVSKA, V.

Celestine of the village of Goritsa, Popovo District. Godishnik
biol 52 no.2:303-310 '57/'58 [publ. '59].

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

~~BRESKOVSKA, V.~~ ESKENAZI, G.

Tourmaline from some Bulgarian deposits. Godishnik biol 54
no.2:15-48 '59/'60 [publ. '61].

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

BREJKOVCKA, V.; IVCHEROVA, I.

Navelcite from the Madzharovo complex ore deposits. Gospishnik
biol 56 no.2:275-284 [161-162 [Publ. 169].

BRESKOVSKA, V.

Quartz-chlorite veins from Surnena Sredna Gora. Godishnik biel
56 no.2:305-309 '61-'62 [Publ. '63].

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

APPENDIX A; HISTORICAL, V.

THESE DOCUMENTS ARE UNCLASSIFIED AND THEIR PREVIOUS PARAGONEADS
GIVEN WITH THIS FILE NO. 11107-2004 160-163[publ. 164]

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

BRUSKOVSKA, V.; GABROVSKA, S.

Characteristics of vesuvianite of the western Ural Mountain.
Godishnik biol. 57 no.1:205-216 '62-'63[part. '64].

DUBNOV, M.V., prof.; BRESKROVNAYA, N.I., starshiy nauchnyy setrudnik

Technique of transplantating the fallopian tubes into the uterus.
Akush. i gin. no.1:28-31 '63. (MIM 17:6)

J. Iz otdeleniya operativnoy ginekologii (zav. - prof. M.V. Dubnov)
Instituta akusherstva i ginekologii (dir. - prof. M.A. Petrov-Maslakov) AMN SSSR.

BRESKY, J.; PROKSAN, F.

Accidents during vitamin B₁ therapy. Cas. lek. cesk. 90 no.29:
800-804 20 July 1951. (CML 21:1)

1. Of the Third Internal Clinic of Charles University in
Prague (Head -- Prof. J. Charvat, M.D.).

BROSKY, J.; DVORAK, L.

Studies on endemic sprue. Cas. lek. cesk. 92 no. 47:1283-1289 20 Nov.
1953. (CIMI 25:4)

1. Of the Third Internal Clinic (Head--Prof. J. Charvat, M.D.) of
Charles University, Prague.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9

*limits of sensitivity in spectral analysis of nonferrous
metals*

AF
RJ
3-20

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000306910003-9"

C A

Spectroanalysis of aluminum, zinc, and their alloys
Wladyslaw Blejski, *Hutnik* 16, 128 30(10)10. A detailed description is given of the procedures used in the analysis of Al (99.99-98.0%), Zn (99.99-99.0%), and several alloys of these metals. Edward A. Ackermann.

BRESLAV, I.S.; SLONIM, A.D., zaveduyushchiy.

Gas metabolism and conditioned responses to food in dogs. Trudy Inst. fiziolog.
1:116-124 '52. (MLRA 6:8)

1. Laboratoriya ekologicheskoy fiziologii. (Conditioned response)
(Respiration)

USSR / Farm Animals. Cattle!

Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7348

Author : Breslav, I. S.

Inst : AS USSR

Title : The Skin Temperature of the Udder and Gas Metabolism During Milking

Orig Pub : V sb.: Vopr. fiziol. s.-kh. zhivotnykh. M.-L., AN SSSR, 1957, 356-359

Abstract : Experiments studying the dermo-vascular reaction of the udder in 3 lactating goats and 2 cows showed that in goats the skin temperature of the udder increases during milking by 0.4 - 0.6° C and in cows by 1 - 2° C and reaches its maximum in goats 10 - 20 minutes, and in cows 20 - 30 minutes after milking and then decreases. As milking is performed by hands

Card 1/3

PAVLOV, Grigoriy Nikiforovich, prof.; NIKITIN, Petr Ivanovich; BIESLAV,
Isaak Solomonovich; PARSADANOVA, K.G., red.; GARINA, T.D.,
tekhn. red.

[Course in animal physiology] Praktikum po fiziologii zhivotnykh.
Pod red. G.N.Pavlova. Moskva, Gos. izd-vo "Vysshiaia shkola,"
1961. 258 p. (MIRA 15:5)
(Physiology)

BRESLAV, I.S.; ZHIRONKIN, A.G.; IL'NITSKIY, A.M.; KONZA, E.A.;
MITYUSHOV, M.I.; NOZDRACHEV, A.D.; SALATSINSKAYA, Ye.N.;
TROSHIKHIN, G.V.; SHMELEVA, A.M.

Some data on the effect of a closed space on the physiological
functions in animals. Probl.kosm.biol. 2:291-302 '62.

(MIRA 16:4)

(SPACE MEDICINE)

L 12951-63

EWT(1)/RDS/ES(a)/ES(b)/ES(c)/ES(k) Pb-4 A/DD

63.

ACCESSION NR: AP3001505

S/0239/63/049/005/0643/0647

62

AUTHOR: Breslav, I. S., Zhironkin, A. G.; Konza, E. A.; Salatsinskaya, Ye. N.; Troshikin, G. V.TITLE: Gas exchange dynamics of white mice under conditions of h₂ partial oxygen pressure

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 49, no. 5, 1963, 643-

TOPIC TAGS: gas exchange, hyperoxia, hypoxia, redox, oxygen

ABSTRACT: Gas exchange dynamics in relation to an organism under hyperoxic conditions is of medical and biological importance but has received little attention. To study this problem experiments were conducted on white mice placed in a glass chamber with an automatic feeder. The chamber was kept under water to maintain a constant temperature (22-23°) and oxygen was supplied automatically. Total amount of carbon dioxide exhaled was determined by titrating the chemical absorber after the experiment. The mice were kept in nitrogen-oxygen mixtures with 60% or 90% oxygen (O₂) content for various periods of time. Some mice were taken from a regular air medium to a hyperoxic medium (60% or 90%) and some from a hyperoxic one to a

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ACCESSION NR: AP3001505

hypoxic one (9% O₂ sub 2). The gas exchange level of mice in a nitrogen-oxygen mixture at first is high and then drops to a level a little higher than normal and remains there. The gas exchange level of mice exposed to hyperoxic conditions for 36 hrs and then moved to a hypoxic medium undergoes a slow decrease. The dynamics of these changes reflect a rearrangement of the redox processes which appears to correspond with sudden changes in the oxygen medium. The author recommends that more detailed studies be made of oxygen concentrations and their effect on the gas exchange level in an organism. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Institut fiziologii im. I. P. Pavlova AN SSSR, Leningrad
(Institute of Physiology, AN SSSR)

SUBMITTED: 15Aug62

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L 19437-63

ACCESSION NR: AP3007180 EWT(1)/BDS/ES(a)/ES(j)/ES(c)/ES(k) AMD/AEFTC Pb-4 A/DD
S/0239/63/049/009/1116/1120

AUTHOR: Breslav, I. S.

TITLE: A unit for oxygen generation and measurement of oxygen consumption during protracted experiments with small animals

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 49, no. 9, 1963, 1116-1120

TOPIC TAGS: oxygen generation, air purification, air consumption, consumption measurement, closed oxygen system, oxygen circulation system

ABSTRACT: A closed oxygen circulation system for small animals is described. It consists of a generator unit (see Fig. 1 of the Enclosure) and a circulation unit (Fig. 2). As shown in Fig. 1, oxygen is produced in 10-liter container 1, filled with peroxides of alkali metals. Perforated pipe 2 reaches almost to the bottom of 1, while its upper part connects by means of T-pipe 3 and screw clamp 4 with pressurized Mariotte's bottle 5. Valve 6 has a

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ACCESSION NR: AP3007180

hermetically sealing clamp. Pipe 7 is connected with two water bottles 9 and 10. Oxygen passes from bottle 10 into a storage tank or is fed directly into the system. The closed oxygen-circulation system is described in Fig. 2. The unit consists of two 5- to 8-liter graduated bottles (k^2). Both bottles are connected with gas distributor 3 (18 x 180 ml). Pipe 4 carries water from container 2, while pipe 5 carries water to container 2. The upper part of the gas distributor communicates with the upper part of container 1 and pipe 1, which feeds oxygen into the system. The T-pipes 7, 8, 9, and 10 allow water and oxygen to alter circulation during replacement or removal of one of the containers. Trap bottle 12 serves to prevent water from entering the circulation system, while water valve 13 prevents the retrograde flow of water. Other elements of the system are dessicator 14, T-pipe 16, and T-pipe 15, serving to provide oxygen samples to be used for analysis. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Institut fiziologii im. I. P. Pavlova AN SSSR,
Leningrad (Institute of Physiology, AN SSSR)

Card 242

S/020/63/149/001/023/023
B144/B186

AUTHORS: Breslav, I. S., Zhironkin, A. G., Shmeleva, A. M.

TITLE: Effect of elevated partial oxygen pressure on the morphological composition of the white blood in mice

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 1, 1963, 207-209

TEXT: Morphological changes of leucocytes were observed in the peripheral blood of mice under the following conditions of hyperoxia: 1) 60 % O₂ for 36 hrs in a closed ventilated system with absorption of CO₂ and moisture and admission of O₂; 2) 90 % O₂ for 36 hrs in the same system; 3) high-pressure (O₂ (2.5 atm) for 90 min; 4) 90 % O₂ for 36 hrs followed by hypoxia (9 % O₂ for 3 hrs); 5) high-pressure O₂ for 90 min with subsequent loss of ~10 % of the total blood. Blood samples were taken before the test and 5 - 6 hrs, 3 and 7 days after termination of hyperoxia conditions. Common to all tests was a significant initial leucopenia,

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mainly due to reduction in lymphocytes. With the exception of test 1, regeneration set in after 2 - 3 days. In tests 4 and 5, a strong leucopenia was coupled with retarded regeneration. The analogy with radiation-induced alterations is obvious. The hypotheses hitherto made to explain these phenomena are summarized, but further studies will be required to decide whether the peroxide, the hypoxic, or the regulatory mechanism is decisive. There are 1 figure and 1 table.

ASSOCIATION: Institut fiziologii im. I. P. Pavlova Akademii nauk SSSR
(Institute of Physics imeni I. P. Pavlov of the Academy of Sciences USSR)

PRESENTED: July 30, 1962, by V. N. Chernigovskiy, Academician

SUBMITTED: July 28, 1962

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L 10188-63

ACCESSION NR: AP3002884

S/0020/63/150/005/1168/1170

AUTHOR: Breslav, I. S.

44

TITLE: Preference of white mice for gas media with various oxygen and carbon dioxide gradients

SOURCE: AN SSSR. Doklady, v. 150, no. 5, 1963, 1168-1170

TOPIC TAGS: preferred gas media, physiologically favorable gas media, gas metabolism, oxygen, carbon dioxide, chemoreceptors, sensitivity to hypoxia, sensitivity to hyperoxia, sensitivity to hypercapnia

ABSTRACT: The capacity of white mice to differentiate between gas media of various compositions and to react appropriately by moving into the medium with the physiologically most favorable composition was studied using a specially devised "gas ladder." The device consists of a long, narrow chamber. The atmosphere at one end of the chamber, the "invariant" end, approximates the composition of ordinary air; the composition of the atmosphere at the other ("variant") end can be varied according to the conditions of the experiment. The chamber is constructed so as to provide a smooth transition (gradient) between

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ACCESSION NR: AP3002884

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the atmospheres of different compositions at the two ends. With an oxygen gradient from 21% (normal) to 9% (hypoxic), the mice showed no decided preference. Lowered partial oxygen pressure in the medium is apparently only sensed when hypoxemia develops and signals from the chemoreceptors of the circulatory system commence. Sensitivity to the moderately hypoxic medium was increased considerably by the addition of 3% CO₂ to the nitrogen-oxygen mixture all along the chamber. Hypercapnia apparently stimulates the receptors, increasing sensitivity to lowered oxygen tension in the blood. The animals reacted sharply to an atmosphere containing only 5% oxygen (with nitrogen); 5% died in the hypoxic zone due to insufficiently rapid motor reactions. A 60% (hyperoxic) oxygen content at the variant end of the gas ladder produced a negative reaction in the majority of the mice; this reaction was more pronounced when the oxygen content was increased to 90%. Hypercapnia induced by the addition of 3% CO₂ strengthened the reaction of the mice to the increased oxygen content, which agrees with data in the literature. With oxygen content normal, the animals reacted negatively to a 16% CO₂ content, about two-thirds of them choosing the zone free of CO₂. Variation from normal of the oxygen content along the length of the ladder weakened the CO₂ reaction of the animals. The high sensitivity of the mice to increased concentrations of CO₂ is explained by the physiological role of CO₂ and the existence of the appropriate receptors in the animals. The

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sharp decrease of CO sub 2 sensitivity in hypoxic and hyperoxic media probably reflects a complex interaction of chemoreceptive signals; however, the importance of changes in sensitivity of nervous centers with changes in partial oxygen pressure in the surrounding medium is not excluded. The article was presented by Academician V. N. Chernigovskiy, 7 January 1963. Orig. art. has: 1 figure and 3 tables.

ASSOCIATION: Institut fiziologii imeni I. P. Pavlova Akademii nauk SSSR
(Institute of Physiology, Academy of Sciences SSSR)

SUBMITTED: 02Jan63 DATE ACQ: 15Jul63 ENCL: 00

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Card 3/3

BRESLAV, I.S.

Active selection of gas media with varying oxygen content by
animals under normal conditions and following the effect of
hyperoxic atmosphere. Probl. kosm. biol. 4:487-491 '65.

(MJRA 18:9)

BRESLAV, I.S.; SHMELEVA, A.M.

Effect of increased partial oxygen pressure on the morphological composition of the peripheral blood in animals. Probl. kosm. biol. 4:492-501 '65.
(MIRA 18;9)

ZHIRONKIN, A.G.; BRESLAV, I.S.; KONZA, E.A.; NOZDRACHEV, A.D.; SALATSINSKAYA,
Ye.N.; TROSHIKHIN, G.V.; FEDOROVA, L.D.; SHMEL'VA, A.M.

Effect of prolonged sojourn of animals in oxygen-enriched air
on some physiological functions. Probl. kosm. biol. 4:518-
530 '65.
(MIRA 18:9)

I 3626-66 EWT(1)/FS(v)-3 DD
ACCESSION NR: AP5021238

UR/0247/65/015/004/0677/0682
612.833.81+612.223.1

AUTHOR: Breslav, I. S.

30
29
B

TITLE: Dynamics and alteration of the motor reaction of animals to different hypoxic media

SOURCE: Zhurnal vysshey nervnoy deyatelinosti, v. 15, no. 4, 1965, 677-682

TOPIC TAGS: animal physiology, respiratory system disease, hypoxia, anoxia, mouse, conditioned reflex

ABSTRACT: A study was made of the motor reactions of mice in response to different hypoxic media. Male white mice 2—2.5 months old were placed in a "gas ladder" and allowed to select their gas medium. The apparatus consisted of an elongated chamber in which a definite gradient of oxygen concentration was maintained, ranging from normal atmospheric (21% oxygen) on one end to hypoxic (12.5% oxygen) on the other. The animals were placed in the apparatus 1/2 hr each day for five days in the first part of the experiment. After several runs in the chamber, the animals selected the normal end of the chamber and stayed there for most of the experiment. When the oxygen content in the hypoxic zone was lowered to 7.5%, the animals showed a greater

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ACCESSION NR: AP5021238

tendency to avoid this zone. With further reduction of the oxygen content to 2%, the animals' reaction was about the same. In the second part of the experiment, the direction of the oxygen gradient in the chamber was reversed. Under these altered conditions, it was observed that the motor reaction of mice to a moderately hypoxic medium (12.5% O₂) was rapid, but their motor reaction to media with a sharply decreased oxygen content (7.5% and especially 2%) was slower. Alteration of this "avoidance reaction" was accompanied by disruption of the animal's normal weight increase. It was postulated that the formation of a motor response to decreased oxygen atmosphere in mice is based on a combination of interoceptive and exteroceptive impulses. The depressing effect of oxygen starvation of reflex activity (both conditioned and unconditioned) is presumed to be responsible for certain features of the reaction, such as the lack of difference in animals' reactions to media containing 7.5% and 2% oxygen. It was found that behavioral reactions to a pronounced hypoxic medium are difficult to reverse (when the oxygen concentration gradient is altered). This is apparently due to the stability of the conditioned reflex and the depressing effect of anoxia on reflex activity. Orig. art. has: 3 figures and 1 table. [JS]

ASSOCIATION: Institut fiziologii im. I. P. Pavlova Akademii nauk SSSR (Institute of Physiology, Academy of Sciences, SSSR)

Card 2/3

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L 3626-66

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Card 3/3

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L 11784-66	EWT(1)/EWT(m)/FS(v)-3/EWP(t)/EWP(b)	SCTB/IJP(c)	DD/JD
ACC NR: AF6001112	SOURCE CODE: UR/0239/65/051/012/1501/1506		
AUTHOR: <u>Breslav, I. S.</u> ; <u>Zhironkin, A. G.</u> ; <u>Salatsinskaya, Ye. N.</u>	55	55	51 B
ORG: <u>Institute of Physiology im. I. P. Pavlova, AN SSSR, Leningrad (Institut fiziologii AN SSSR)</u>	55		
TITLE: Active selection of nitrogen-oxygen and helium-oxygen mixtures by animals and humans	21		
SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 12, 1965, 1501-1506			
TOPIC TAGS: human physiology, animal physiology, gas mixture, oxygen, helium, respiratory system, helium oxygen atmosphere			
ABSTRACT: The authors used a "gas ladder" devised by Breslav to determine the gas preference of white mice, under conditions which permitted these animals to make an active choice between respired helium-oxygen and nitrogen-oxygen mixtures. Normal and decreased (10-12.5%) levels of oxygen were supplied with each diluent. Human subjects were allowed to choose freely either of the two mixtures and to change from one to the other simply by turning a stopcock. The animals and humans usually chose the helium mixtures in preference to the nitrogen-oxygen mixtures with both the normal and low oxygen levels. When the same gas (nitrogen or helium) was the diluent, the mice and the humans preferred the normal oxygen mixture to the hypoxic. The auth-			
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